

0910

0910

#2



ENTERED

OIPF

## RAW SEQUENCE LISTING

DATE: 02/26/2002

PATENT APPLICATION: US/10/071,867

TIME: 13:18:53

Input Set : A:\5294-000004 - Sequence Listing.txt

Output Set: N:\CRF3\02262002\J071867.raw

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1 <110> APPLICANT: CreaGene Inc.
3 <120> TITLE OF INVENTION: METHOD FOR IMPROVING GENETIC STABILITY OF FOREIGN INSERT
4   NUCLEOTIDE SEQUENCE IN RECOMBINANT SINGLE-STRANDED RNA VIRUS
6 <130> FILE REFERENCE: CreaGene-USA-1
C--> 8 <140> CURRENT APPLICATION NUMBER: US/10/071,867
C--> 8 <141> CURRENT FILING DATE: 2002-02-08
      8 <150> PRIOR APPLICATION NUMBER: KR 2001-6229
      9 <151> PRIOR FILING DATE: 2001-02-08
11 <160> NUMBER OF SEQ ID NOS: 95
13 <170> SOFTWARE: KopatentIn 1.71
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 300
17 <212> TYPE: DNA
18 <213> ORGANISM: Artificial Sequence
20 <220> FEATURE:
21 <223> OTHER INFORMATION: SIV gag-100
24 <400> SEQUENCE: 1
25 agcccgagaa cattaatgc ctgggtaaaa ttgatagagg aaaagaaatt tggagcagaa           60
27 gtagtgccag gatttcaggc actgtcagaa gggtgcaccc cctatgacat taatcagatg           120
29 ttaaattgtg tgggagacca tcaagcggct atgcagatta tcagagatat tataaacgag           180
31 gaggtgcag attgggactt gcagcaccca caaccagctc cacaacaagg acaacttagg           240
33 gagcgtcag gatcagatat tgcaggaaca actagttcag tagatgaaca aatccagtgg           300
35                                     300
38 <210> SEQ ID NO: 2
39 <211> LENGTH: 300
40 <212> TYPE: DNA
41 <213> ORGANISM: Artificial Sequence
43 <220> FEATURE:
44 <223> OTHER INFORMATION: SIV gag-100/M
47 <400> SEQUENCE: 2
48 agtccaagaa cattaatgc atgggtaaaa ttaatagaag aaaaaaaatt tggagcagaa           60
50 gtagttccag gatttcaagc attatcagaa ggttgactc catatgatat taatcaaag           120
52 ttaaattgtg taggagatca tcaagcagct atgcaaatta taagagatat tataaatgaa           180
54 gaagctgcag attgggattt acaacatcca caaccagctc cacaacaagg acaattaaga           240
56 gaaccttcag gatcagatat tgcaggaaca actagttcag tagatgaaca aattcaatgg           300
58                                     300
61 <210> SEQ ID NO: 3
62 <211> LENGTH: 342
63 <212> TYPE: DNA
64 <213> ORGANISM: Artificial Sequence
66 <220> FEATURE:
67 <223> OTHER INFORMATION: SIV gag-114
70 <400> SEQUENCE: 3

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71 ccagtacaac aaataggtgg taactatgtc cacctgccat taagcccgag aacattaaat      60
73 gcctgggtaa aattgataga ggaaaagaaa tttggagcag aagtagtgcc aggatttcag      120
75 gcaactgtcag aaggttgcac cccctatgac attaatcaga tgttaaattg tgtgggagac      180
77 catcaagcgg ctatgcagat tatcagagat attataaacg aggaggctgc agattgggac      240
79 ttgcagcacc cacaaccagc tccacaacaa ggacaactta gggagccgtc aggatcagat      300
81 attgcaggaa caactagttc agtagatgaa caaatccagt gg      342
84 <210> SEQ ID NO: 4
85 <211> LENGTH: 501
86 <212> TYPE: DNA
87 <213> ORGANISM: Artificial Sequence
89 <220> FEATURE:
90 <223> OTHER INFORMATION: SIV p27-167
93 <400> SEQUENCE: 4
94 ccagtacaac aaataggtgg taactatgtc cacctgccat taagcccgag aacattaaat      60
96 gcctgggtaa aattgataga ggaaaagaaa tttggagcag aagtagtgcc aggatttcag      120
98 gcaactgtcag aaggttgcac cccctatgac attaatcaga tgttaaattg tgtgggagac      180
100 catcaagcgg ctatgcagat tatcagagat attataaacg aggaggctgc agattgggac      240
102 ttgcagcacc cacaaccagc tccacaacaa ggacaactta gggagccgtc aggatcagat      300
104 attgcaggaa caactagttc agtagatgaa caaatccagt ggatgtacag acaacagaa      360
106 cccataccag taggcaacat ttacaggaga tggatccaac tgggggttgca aaaatgtgtc      420
108 agaatgtata acccaacaaa cattctagat gtaaaacaag ggccaaaaga gccatttcag      480
110 agctatgtag acaggttcta c      501
113 <210> SEQ ID NO: 5
114 <211> LENGTH: 450
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: SIV p27-150
122 <400> SEQUENCE: 5
123 ccagtacaac aaataggtgg taactatgtc cacctgccat taagcccgag aacattaaat      60
125 gcctgggtaa aattgataga ggaaaagaaa tttggagcag aagtagtgcc aggatttcag      120
127 gcaactgtcag aaggttgcac cccctatgac attaatcaga tgttaaattg tgtgggagac      180
129 catcaagcgg ctatgcagat tatcagagat attataaacg aggaggctgc agattgggac      240
131 ttgcagcacc cacaaccagc tccacaacaa ggacaactta gggagccgtc aggatcagat      300
133 attgcaggaa caactagttc agtagatgaa caaatccagt ggatgtacag acaacagaa      360
135 cccataccag taggcaacat ttacaggaga tggatccaac tgggggttgca aaaatgtgtc      420
137 agaatgtata acccaacaaa cattctagat      450
140 <210> SEQ ID NO: 6
141 <211> LENGTH: 324
142 <212> TYPE: DNA
143 <213> ORGANISM: Artificial Sequence
145 <220> FEATURE:
146 <223> OTHER INFORMATION: SIV env-108
149 <400> SEQUENCE: 6
150 acttctactt ggtttggtt taatggaact agagcagaaa atagaactta tatttactgg      60
152 catggtaggg ataataggac tataattagt ttaaataagt attataatct aacaatgaaa      120
154 tgtagaagac caggaaataa gacagtttta ccagtcacca ttatgtctgg attggttttc      180
156 cactcacaac caatcaatga taggccaaag caggcatggt gttggtttgg aggaaaatgg      240
158 aaggatgcaa taaaagaggt gaagcagacc attgtcaaac atcccaggta tactggaact      300

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160 aacaatactg ataaaaatcaa ttg      324
163 <210> SEQ ID NO: 7
164 <211> LENGTH: 324
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: SIV env-108/M
172 <400> SEQUENCE: 7
173 actagcactt ggttcggctt caacggaact agggcagaga acagaactta catctactgg      60
175 catggtaggg acaaccggac gatcatcagc ctgaacaagt actacaacct caccatgaaa      120
177 tgcaggagac caggaaataa gacagtgcta ccagtcacca tcatgtccgg gttggtcttc      180
179 cactcacagc ccatcaatga caggcccaag caggcctggt gttggttcgg aggcaagtgg      240
181 aaggatgcc aagaggagt gaagcagacc attgtcaagc atcccaggta cactggaact      300
183 aacaacactg acaagatcaa ttg      324
186 <210> SEQ ID NO: 8
187 <211> LENGTH: 294
188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: HIV-1 env-98
195 <400> SEQUENCE: 8
196 ttaaatggca gtctagcaga agaagacata gtaattagat ctgaaaattt cacagacaat      60
198 gctaaaacca taatagtaca gctaaatgaa tctgtagtaa ttaattgtac aagacccaac      120
200 aacaatacaa gaagaagggt atctatagga ccaggagag cattttatgc aagaagaaac      180
202 ataataggag atataagaca agcacattgt aacattagta gagcaaaatg gaataacact      240
204 ttacaacaga tagttataaa attaagagaa aaatttagga ataaaacaat agcc      294
207 <210> SEQ ID NO: 9
208 <211> LENGTH: 294
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: HIV-1 env-98/M
216 <400> SEQUENCE: 9
217 ttaaatggca gtctagcaga agaagacata gtaattagat ctgaaaattt cacagacaat      60
219 gctaaaacca taatagtaca gctaaatgaa tctgtagtaa ttaattgtac aagacccaac      120
221 aacaatacaa gaagaagggt atctatagga ccaggagag cattttatgc aagaagaaac      180
223 ataataggag atataagaca agcacattgt aacattagta gagcaaaatg gaataacact      240
225 ttacaacaga tcgtgatcaa gttcgggag aagttccgga acaagacgat cgcc      294
228 <210> SEQ ID NO: 10
229 <211> LENGTH: 249
230 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
233 <220> FEATURE:
234 <223> OTHER INFORMATION: HIV-1 env-83
237 <400> SEQUENCE: 10
238 ttaaatggca gtctagcaga agaagacata gtaattagat ctgaaaattt cacagacaat      60
240 gctaaaacca taatagtaca gctaaatgaa tctgtagtaa ttaattgtac aagacccaac      120
242 aacaatacaa gaagaagggt atctatagga ccaggagag cattttatgc aagaagaaac      180
244 ataataggag atataagaca agcacattgt aacattagta gagcaaaatg gaataacact      240

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246 ttacaacag 249
249 <210> SEQ ID NO: 11
250 <211> LENGTH: 213
251 <212> TYPE: DNA
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: HIV-1 env-71
258 <400> SEQUENCE: 11
259 ctaaatgaat ctgtagtaat taattgtaca agacccaaca acaatacaag aagaaggtta 60
261 tctataggac cagggagagc attttatgca agaagaaaca taataggaga tataagacaa 120
263 gcacattgta acattagtag agcaaaatgg aataacactt tacaacagat agttataaaa 180
265 ttaagagaaa aatttaggaa taaaacaata gcc 213
268 <210> SEQ ID NO: 12
269 <211> LENGTH: 381
270 <212> TYPE: DNA
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: PV 2-127
277 <400> SEQUENCE: 12
278 gcgctgacag ccgtagagac aggggccacc aaccattgg tgccttcaga cacggtacaa 60
280 actcgtcacg tcatccaaaa gcgagcgcg tcggagtcta cggttgagtc tttcttcgca 120
282 agaggagctt gtgtggccat tattgaagtg gataatgatg ctccaacaag gcgtgccagt 180
284 aaattatttt cagtctggaa gataacttac aaggacaccg ttcagttaag acgtaagttg 240
286 gagttcttta catattcaag gtttgacatg gagttcacct ttgtggttac atccaattat 300
288 accgatgcaa acaatgggca cgcactgaat caagtttacc agataatgta cataccacct 360
290 ggggcaccga tccctggcaa g 381
293 <210> SEQ ID NO: 13
294 <211> LENGTH: 354
295 <212> TYPE: DNA
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: PV 2-118
302 <400> SEQUENCE: 13
303 gcttgtgtgg ccattattga agtggataat gatgctccaa caaggcgtgc cagtaaatta 60
305 ttttcagtct ggaagataac ttacaaggac accgttcagt taagacgtaa gttggagttc 120
307 ttacatatt caaggtttga catggagttc acctttgtgg ttacatccaa ttataccgat 180
309 gcaaacaatg ggcacgcact gaatcaagtt taccagataa tgtacatacc acctggggca 240
311 ccgatccctg gcaagcggaa tgattacaca tggcaaacgt catctaacce atcagtgttt 300
313 tacacttacg gggcacctcc agctagaata tcagtgcctt acgtgggcat tgcc 354
316 <210> SEQ ID NO: 14
317 <211> LENGTH: 330
318 <212> TYPE: DNA
319 <213> ORGANISM: Artificial Sequence
321 <220> FEATURE:
322 <223> OTHER INFORMATION: PV 3-110
325 <400> SEQUENCE: 14
326 cagtagtcc aacgacgcag caggtcagag tccacaatag aatcattctt cgcacgcggg 60
328 gcgtgcgtcg ctattattga ggtggacaat gaacaaccaa ccacccgggc acagaaacta 120
330 ttgccatgt ggcgcattac atacaaagat acagtgcagt tgcgccgtaa gttggagttt 180

```

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Output Set: N:\CRF3\02262002\J071867.raw

```

332 ttcacatact ctcggttttga catggaattc accttcgtgg taaccgccaa cttcaccaac      240
334 gctaataatg ggcattgact caaccagggtg taccagataa tgtacatccc cccaggggca      300
336 cccacaccaa agtcatggga cgactacact                                     330
339 <210> SEQ ID NO: 15
340 <211> LENGTH: 480
341 <212> TYPE: DNA
342 <213> ORGANISM: Artificial Sequence
344 <220> FEATURE:
345 <223> OTHER INFORMATION: HCV core-160
348 <400> SEQUENCE: 15
349 atgagcacia atcctaaacc tcaaagaaaa accaaaagaa acaccaaccg tcgcccacaa      60
351 gacgtcaagt tcccgggcgg tggtcagatc gttggtggag ttacctgtt gccgcgcagg      120
353 ggccccaggt tgggtgtgcg cgcgactagg aagacttccg agcggtcgca acctcgtgga      180
355 aggcgacagc ctatcccaaa ggctcgccaa cccgagggtg ggacctgggc tcagcccggg      240
357 tacccttggc ccctctatgg caatgagggt ctgggatggg caggatggct cctgtcaccc      300
359 cgcggtcttc ggcctagtgt gggccccaca gacccccggc gtaggtcgcg taatttgggt      360
361 aaggtcatcg atactctcac atgcggcttc gccgacctca tgggtacat tccgctcgtc      420
363 ggcgcccccc tagggggcgt tgccagggcc ttggcacatg gtgtccggct tctggaggac      480
365
368 <210> SEQ ID NO: 16
369 <211> LENGTH: 300
370 <212> TYPE: DNA
371 <213> ORGANISM: Artificial Sequence
373 <220> FEATURE:
374 <223> OTHER INFORMATION: HCV core-100
377 <400> SEQUENCE: 16
378 atgagcacia atcctaaacc tcaaagaaaa accaaaagaa acaccaaccg tcgcccacaa      60
380 gacgtcaagt tcccgggcgg tggtcagatc gttggtggag ttacctgtt gccgcgcagg      120
382 ggccccaggt tgggtgtgcg cgcgactagg aagacttccg agcggtcgca acctcgtgga      180
384 aggcgacagc ctatcccaaa ggctcgccaa cccgagggtg ggacctgggc tcagcccggg      240
386 tacccttggc ccctctatgg caatgagggt ctgggatggg caggatggct cctgtcaccc      300
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391 <210> SEQ ID NO: 17
392 <211> LENGTH: 399
393 <212> TYPE: DNA
394 <213> ORGANISM: Artificial Sequence
396 <220> FEATURE:
397 <223> OTHER INFORMATION: PV 2.3-131
400 <400> SEQUENCE: 17
401 gcgctgacag ccgtagagac aggggccacc aaccattgg tgcttcaga cacggtacaa      60
403 actcgtcacg tcatccaaaa gcggacgcgg tcggagtcta cggttgagtc tttcttcgca      120
405 agaggagctt gtgtggccat tattgaagtg gataatgat ctccaacaag gcgtgccagt      180
407 aaattatttt cagtctggaa gataactgaa ttcgagtcca caatagaatc attcttcgca      240
409 cgcggggcgt gcgtcgctat tattgagggt gacaatgaac aaccaaccac ccgggcacag      300
411 aaactatttg ccatgtggcg cattacatac aaagatacag tgcagttgcg ccgtaagttg      360
413 gagtttttca catactctcg ttttgacatg gaattcacc                                     399
416 <210> SEQ ID NO: 18
417 <211> LENGTH: 336
418 <212> TYPE: DNA

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## VERIFICATION SUMMARY

DATE: 02/26/2002

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Input Set : A:\5294-000004 - Sequence Listing.txt

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L:8 M:270 C: Current Application Number differs, Replaced Current Application No

L:8 M:271 C: Current Filing Date differs, Replaced Current Filing Date